UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

OCTOBER 1967

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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U. S. Department of the Interior
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P. O. Box 271
La Jolla, California 92037

*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, U. S. Custom House, Terminal Island, California

1967 ALBACORE SEASON NEAR TERMINATION

A series of intense early fall storms continued to batter the Pacific Northwest coast during October, effectively terminating large-scale albacore fishing activity. The continuation of an intense low pressure center in the Gulf of Alaska brought gale-force winds and very rough to high seas (except for a few breaks between storms) to the entire region north of Cape Mendocino.

The sea surface temperature advantage of up to 6-8° F warmer than normal in the Washington-Oregon offshore region has been dramatically reduced to only 1-2° F during the month of October, as sharply-accelerated evaporation and wind mixing have forced the upper mixed layer of the sea to yield its vast store of excess heat to the atmosphere. At month-end, sea surface temperatures still remained optimal for albacore, and occasional sightings and catches by weather-hardy halibut boats proved that albacore still remained in the region in spite of the onset of winter-like weather.

Nevertheless, fishing activity was essentially terminated by mid-month. The bulk of Oregon and California landings actually were taken during September's record fishing and carried aboard until the fleet was forced to put into port by the early fall storms. Some small fares up to 6-10 tons were reported in the third week of the month, but by and large, October catches were minimal. California-based boats began to return to home port during the second and third week, and California landings rose slightly as a result. Small-scale activity was favored by a show of fish in the Point Sur-Morro Bay offshore area, but was nowhere substantial enough to stimulate a last-minute rush to the grounds. Furthermore, fishing in this area was hindered by persistent northwest winds up to 35 knots.

The 1967 season will be long remembered by the fishing community. No fish were available in June anywhere along the Pacific Coast, and commercial-scale fishing did not break until mid-July. Consequently, early-season landings at California and Oregon ports were the poorest since the 1941-45 period. Record warm weather in the Pacific Northwest created ideal fishing conditions there in August and September, and the major center of activity soon became fixed north of Cape Blanco to near Destruction Island.

Virtually 90-95 percent of all landings were taken in the 70-day interval from July 21-September 28 off Oregon and Washington. All-time record catches (see last month's issue of this publication) are expected to show record or near-record catches per day's fishing effort. This year, a fleet scarcely one-fourth the size of the 1944 fleet (but with much greater range, capacity and efficiency) fished an estimated total season of 80-90 days to produce an estimated 42,000,000 pounds.[1/] Thus, in spite of a very late start and an unseasonal ending in late September, the total production equalled the 1945-65 average. Had weather conditions in October remained favorable, the available evidence indicates that 1967 would have indeed exceeded the previous 1944 production record in the Northwest.

Glenn A. Flittner
November 1, 1967

[1/] In the record 1944 season, an estimated 1500-2000 boats fishing approximately 210 days from late May to early December off the Pacific Coast produced 52,563,487 pounds, of which 34,109,555 pounds were landed in Oregon and Washington.

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN
OCTOBER 1967

Acknowledgements

The following organizations and stations contributed data for the October 1967 charts:

U. S. Bureau of Commercial Fisheries Exploratory Fishing and Gear Research Base, Seattle, Washington
U. S. Bureau of Commercial Fisheries Biological Laboratories La Jolla, California; Honolulu, Hawaii; and Seattle, Washington
U. S. Coast Guard Air Station, San Diego, California
U. S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U. S. Naval Weather Service, Fleet Numerical Weather Facility Monterey, California
Environmental Science Services Administration
U. S. Weather Bureau, San Diego, California
U. S. Weather Bureau Forecast Center, Los Angeles, California
Hopkins Marine Station, Pacific Grove, California by J. P. Balesteri
Inter-American Geodetic Survey by David Ortega at Manzanillo, Mexico; L. A. Peren at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; S. Valenzuela at La Libertad, Ecuador; LMS, EGS, MCHF at Talara, Peru; Felise Falcon at San Juan, Peru; Arica, Antofagasta, Caldera, Valparaiso, and Talcahuano, Chile, through the courtesy of St. Hellmuth A. Sievers C. at the Instituto Hidrografico de la Armada, Valparaiso, Chile
Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California
Kelco Company, San Diego, California
Oregon State University, Department of Oceanography, Corvallis, Oregon R/V Yaquina
Pacific Missile Range, Range Operations Department, Geophysics Division, Point Mugu, California
Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by Lily Collins at Quatsino Lightstation; Wayne G. McMann at Cape St. James Light; O. A. Edwards at Amphitrite Point Light; G. C. Wilkes at Langara Island Light
Scripps Institution of Oceanography, La Jolla, California by Margaret Robinson and Hans Klein
W. R. Grace and Company, New York by Dr. I. William Lane
Ships Princess, Martinac, Californian

Charts

Figure 1. --Mean sea surface temperatures (°F) derived from approximately 9000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2. --Deviation of sea surface temperatures (°F) from long term charts of H. O. 225. Hatched areas are colder in 1967.

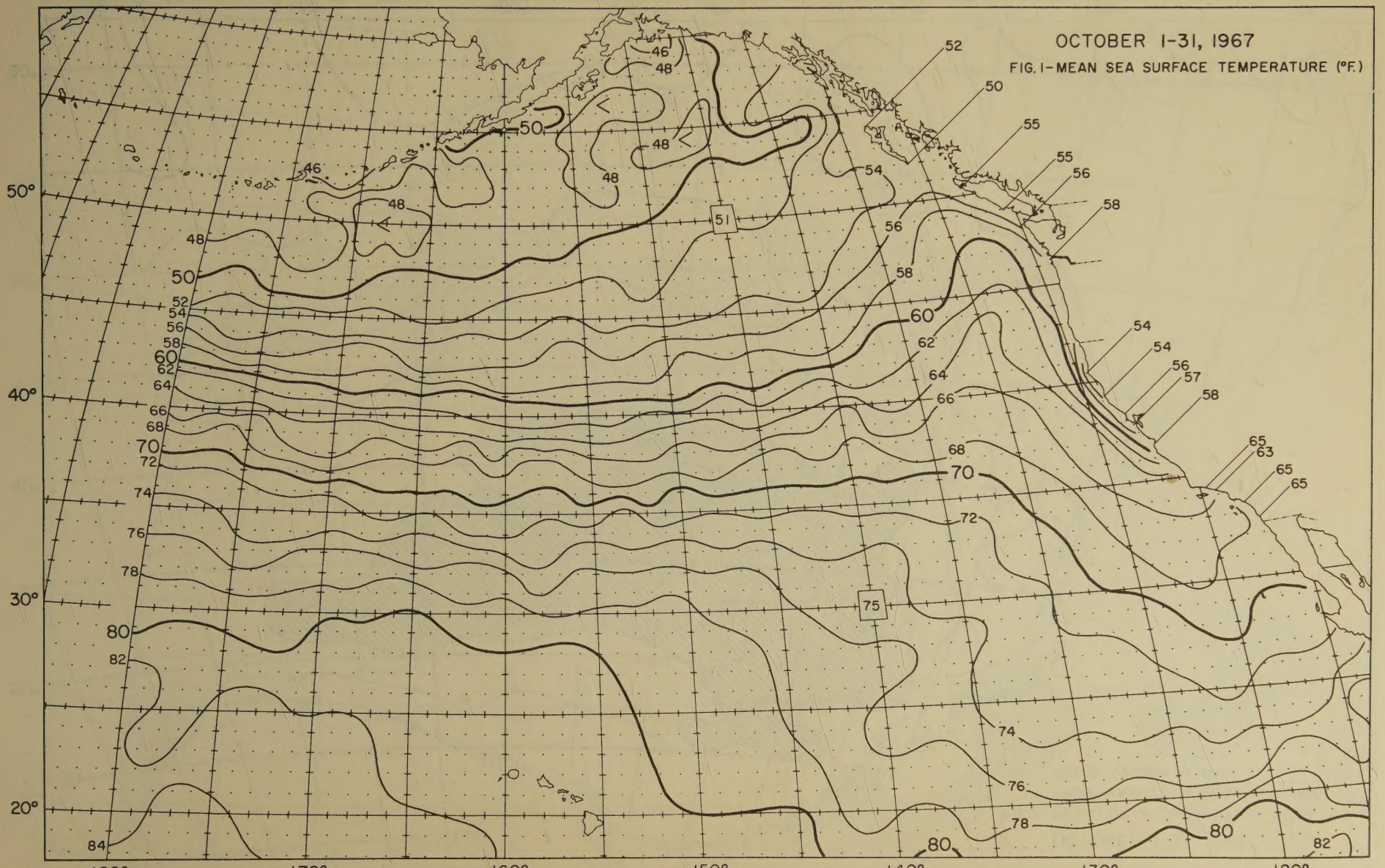
Figure 3. --Deviation of sea surface temperatures (°F) from those of October 1966. Hatched areas are colder in 1967.

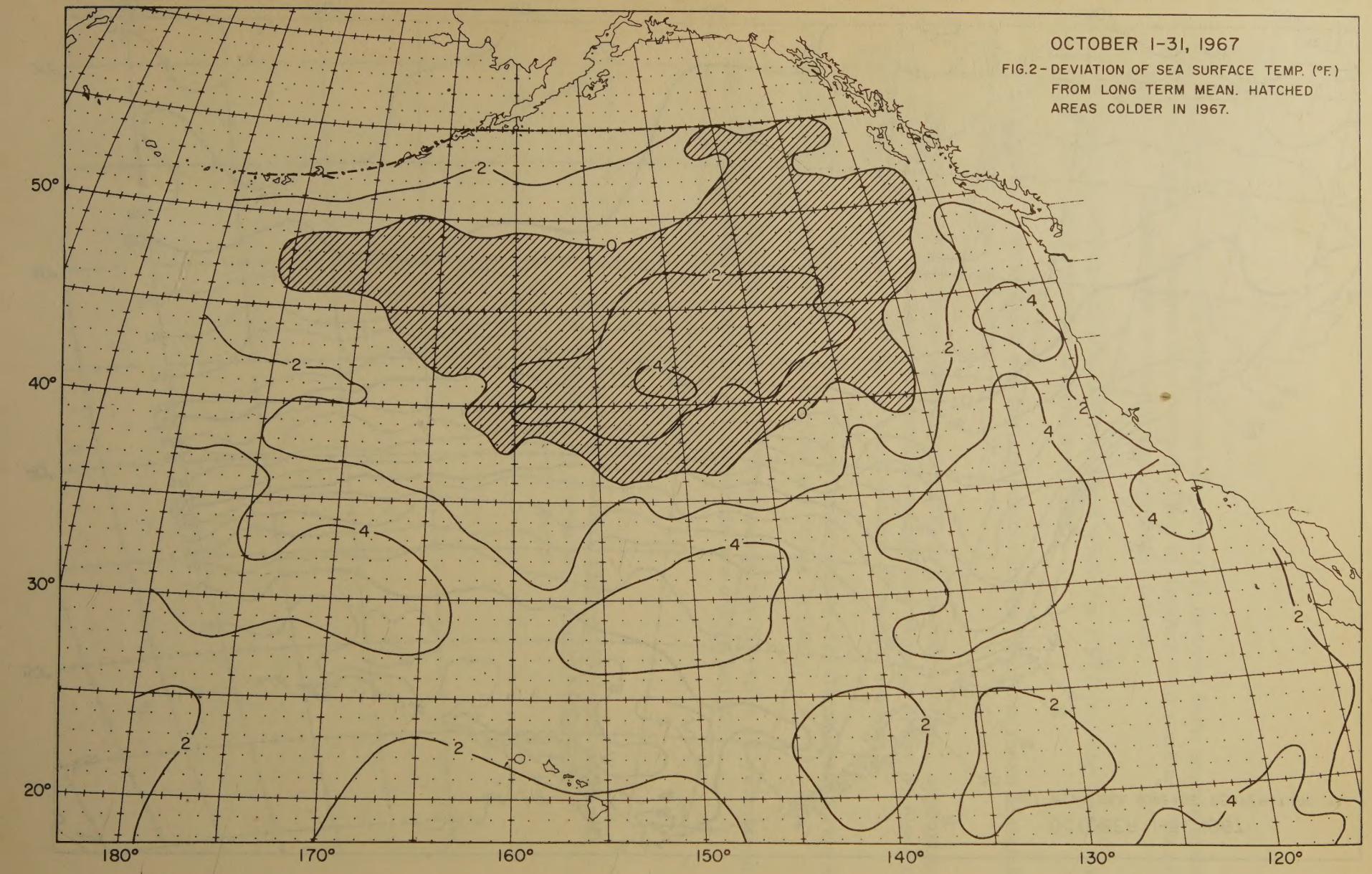
Figure 4. --Sea surface temperatures (°F) by 1-degree squares, approximately 3000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

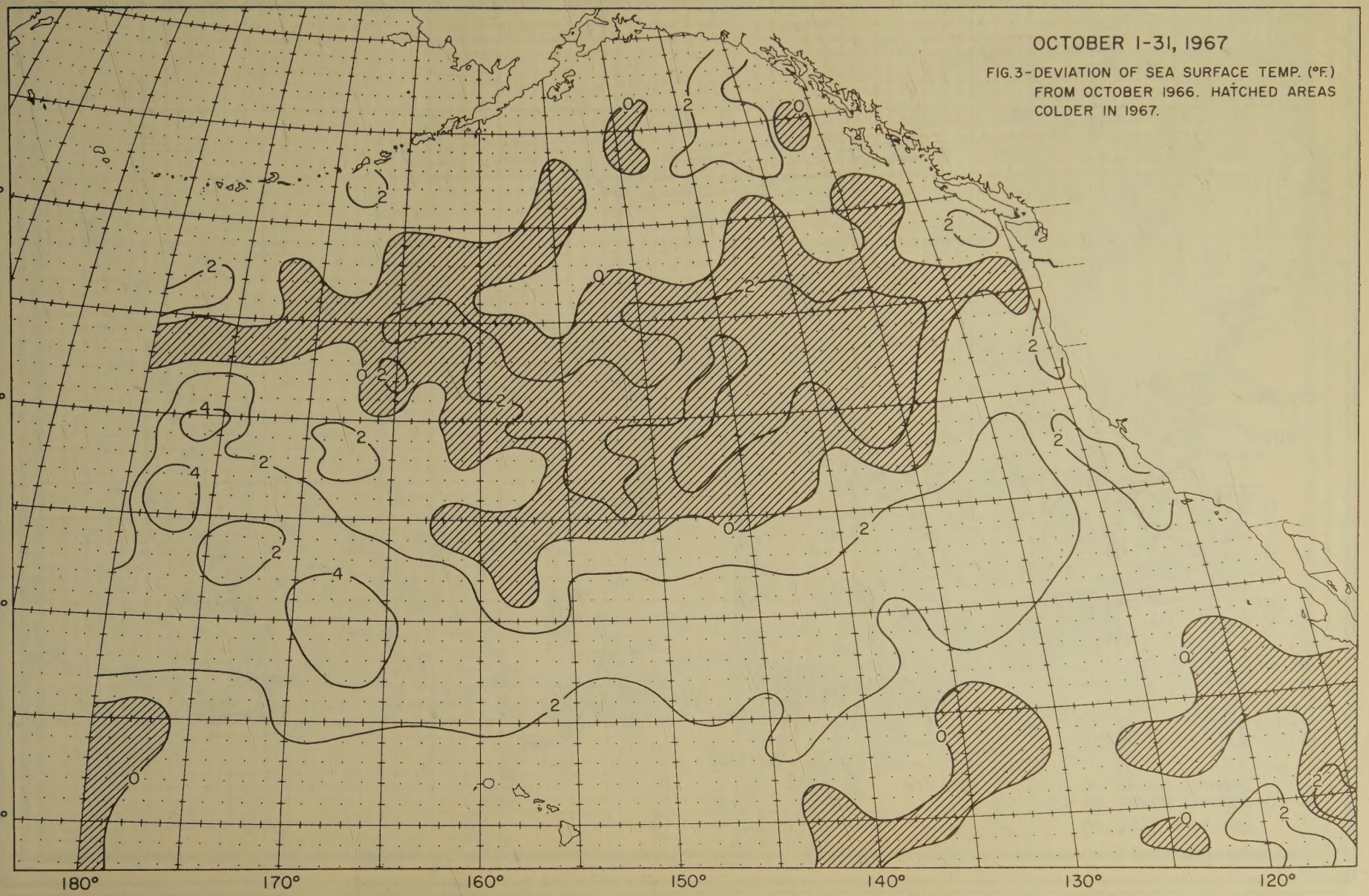
Figure 5. --Deviation of sea surface temperatures (°F) October 1967-October 1966 by 1-degree squares. Shaded areas are colder in 1967.

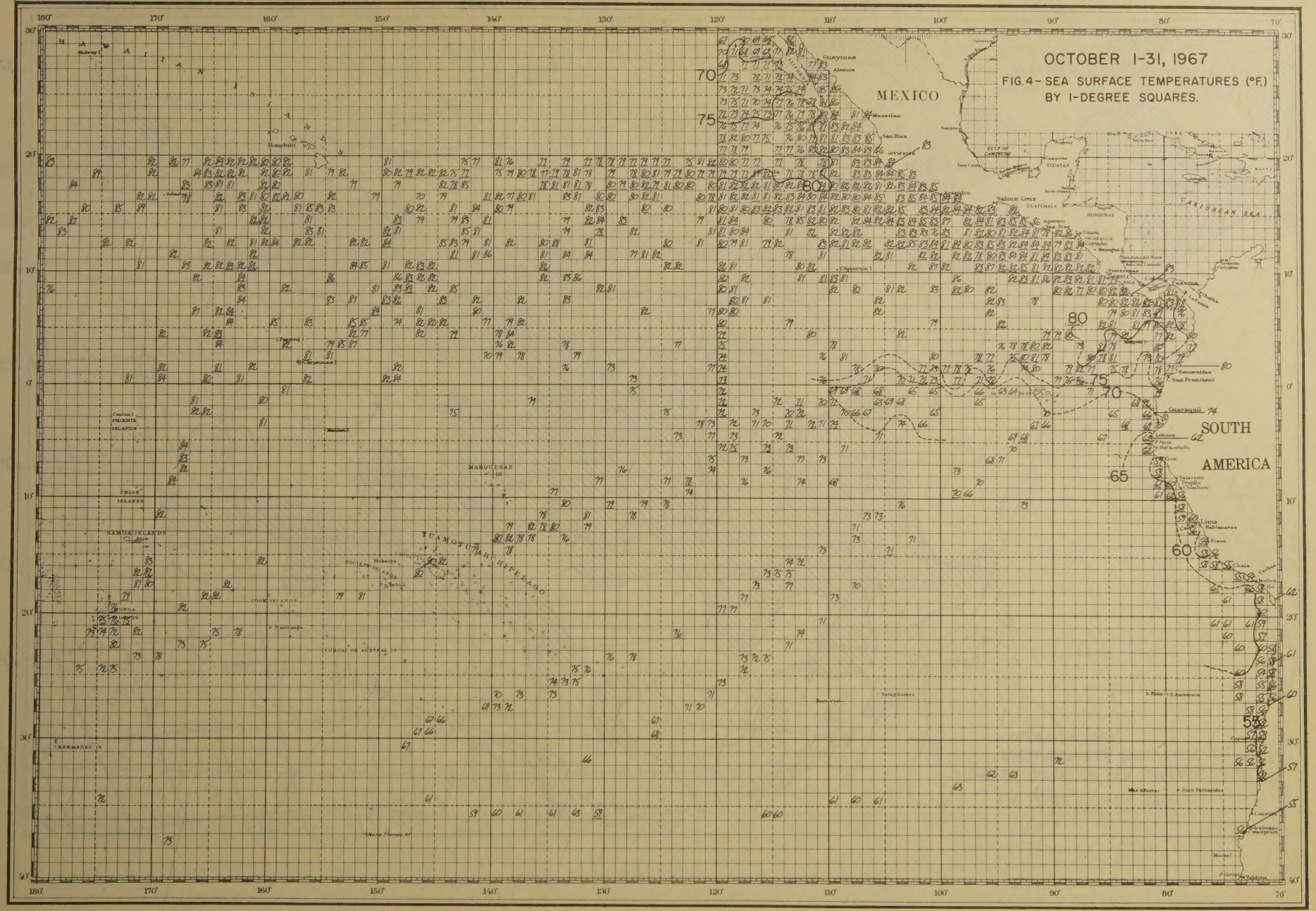
Figure 6. --Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1967.

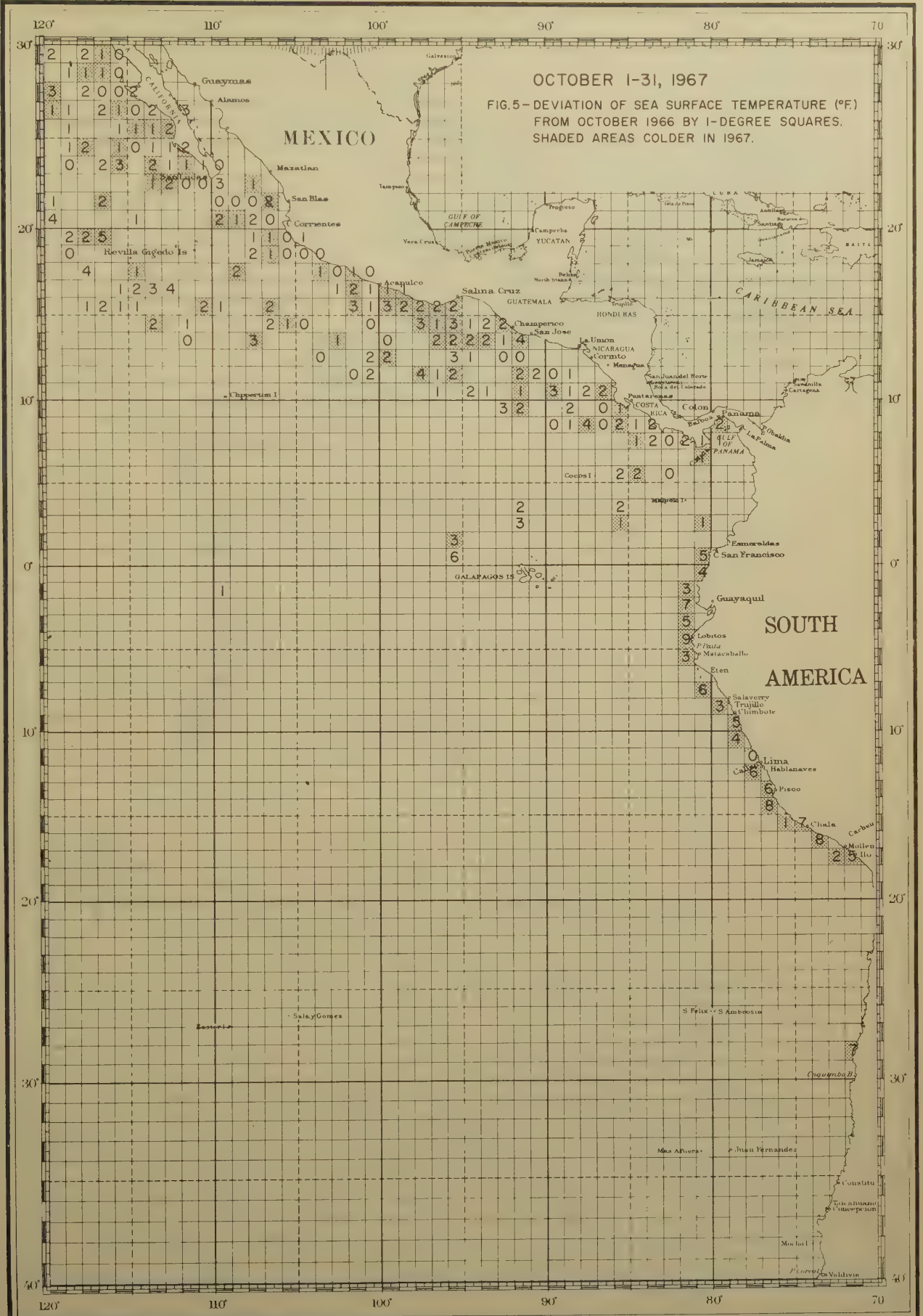
James A. Renner, Fishery Biologist (General)
Kenneth S. Raymond, Scientific Illustrator
November 7, 1967

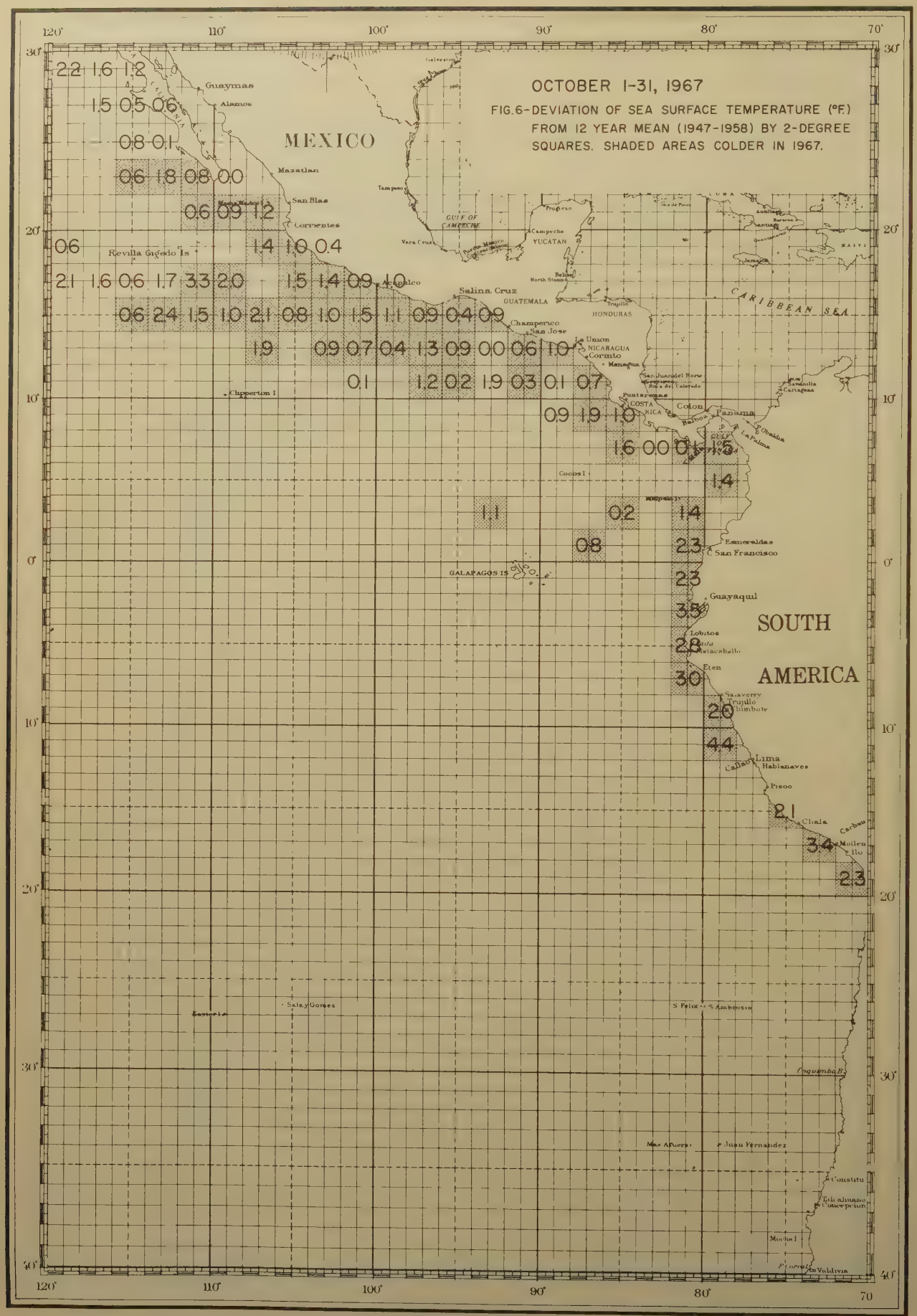

OCTOBER 1-31, 1967
FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
51
75

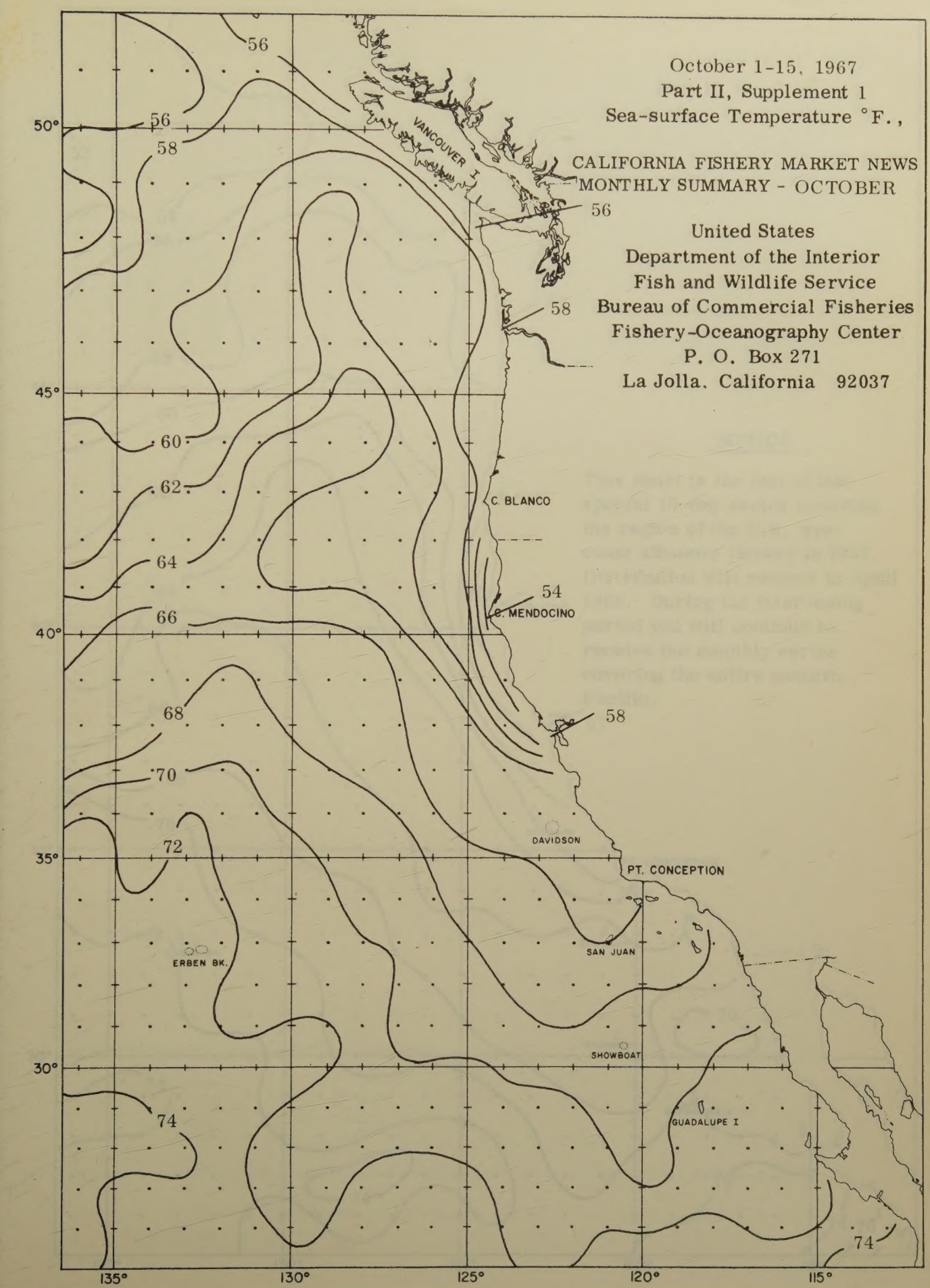

OCTOBER 1-31, 1967
FIG.2 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1967.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2
4

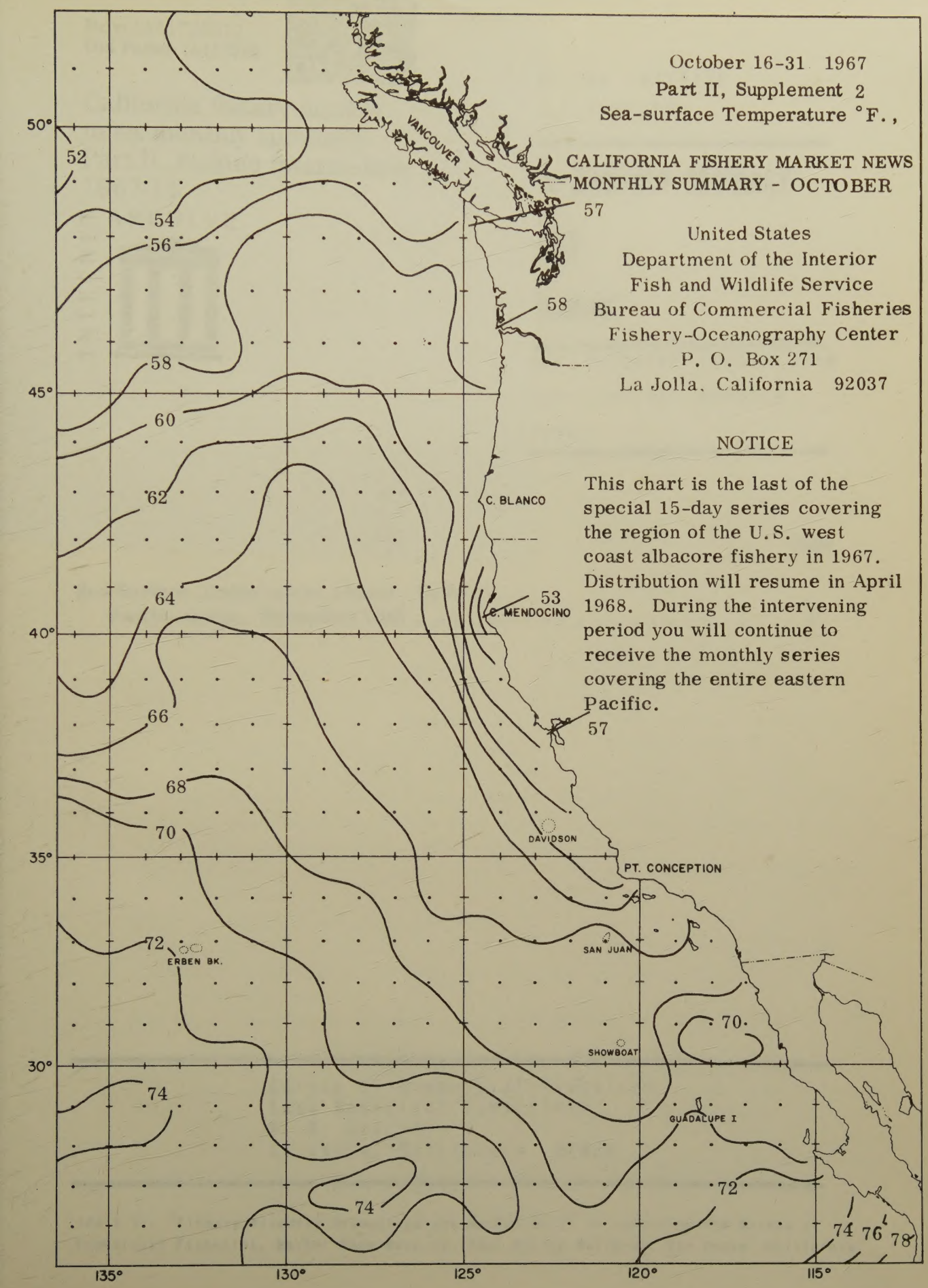

OCTOBER 1-31, 1967
FIG. 3 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM OCTOBER 1966. HATCHED AREAS COLDER IN 1967.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


OCTOBER 1-31, 1967
FIG.4- SEA SURFACE TEMPERATURES (°F.) BY 1-DEGREE SQUARES.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
YUCATAN
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
CUBA
Guaymas
Alamos
Mazatlan
San Blas
Salina Cruz
Guayaquil
Esmeraldas
San Francisco
Salaverry
Trujillo
Huacho
Lima
Callao
Pisco
Chala
Mollendo
Arica
Iquique
Antofagasta
Caldera
Coquimbo
Valparaiso
Talcahuano
Concepcion
Mocha I.
Juan Fernandez
Mas Afuera
S. Felix
S. Ambrosio
Easter I.
HAWAIIAN ISLANDS
Honolulu
Kahului
Hilo
Kauai
Niihau
Kaula
Nihoa
Necker I.
French Frigate Shoals
Gardner Pinnacles
Maro Reef
Lisianski I.
Laysan I.
Midway Is.
Kure I.
PHOENIX ISLANDS
Canton I.
Enderbury I.
UNION ISLANDS
Fakaofo
SAMOA ISLANDS
Savaii
Upolu
Tutuila
TOKELAU OR UNION ISLANDS
TUAMOTU OR LOW ARCHIPELAGO
SOCIETY ISLANDS
Tahiti
Moorea
MARQUESAS
COOK ISLANDS
Rarotonga
TONGA
TUBUAI OR AUSTRAL IS.
KERMADEC IS.
Raoul I.
Macauley I.
Curtis I.
Sunday I.
Malden I.
Starbuck I.
Jarvis I.
Palmyra I.
Christmas I.
Fanning I.
Washington I.
Tabuaeran
Flint I.
Vostok I.
Caroline I.
Ocean I.
Nassau I.
Suwarrow I.
Penrhyn
Manihiki
Rakahanga
Pukapuka
Nassau I.
Rose I.
Swains I.
Fakaofo
Nukunonu
Atafu
Niue I.
Aitutaki
Manuae
Mitiaro
Atiu
Mauke
Rimatara
Rurutu
Tubuai
Raivavae
Rapa
Marotiri
Pitcairn I.
Henderson I.
Ducie I.
Oeno I.
Gambier Is.
Mangareva
Temoe
Nukutavake
Pukarua
Reao
Pinaki
Hao
Amanu
Tauere
Tikehau
Rangiroa
Arutua
Kaukura
Apatuki
Makatea
Maiao
Tubuai
Raivavae
Rapa
Marotiri
Pitcairn I.
Henderson I.
Ducie I.
Oeno I.
Gambier Is.
Mangareva
Temoe
Nukutavake
Pukarua
Reao
Pinaki
Hao
Amanu
Tauere
Tikehau
Rangiroa
Arutua
Kaukura
Apatuki
Makatea
Maiao
180°
170°
160°
150°
140°
130°
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
10°
20°
30°
40°


OCTOBER 1-31, 1967
FIG.5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM OCTOBER 1966 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1967.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
YUCATAN
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
CUBA
JAMAICA
HAITI
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Colon
Panama
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Plata
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Hablanaves
Pisco
Chala
Cabeza
Mollendo
Ilo
Sala y Gomez
S Felix
S Ambrosio
Mas Afuera
Juan Fernandez
Valdivia
Progreso
Campeche
Tampico
Vera Cruz
Galveston
Trujillo
Cartagena
Chiperium I


OCTOBER 1-31, 1967
FIG.6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1967.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Chippertion I
Tampico
Progreso
Campeche
YUCATAN
Vera Cruz
Belize
Trujillo
Puntarenas
Colon
Panama
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Eten
Salaverry
Trujillo
Chimbote
Callao
Lima
Hablanaves
Pisco
Chala
Cerbas
Mollendo
Salas y Gomez
Easter I
S Felix
S Ambrosio
Coquimbo
Mas Afuera
Juan Fernandez
Constitu
Talcahuano
Concepcion
Mocha I
Valdivia
2.2 1.6 1.2
1.5 0.5 0.6
0.8 0.1
0.6 1.8 0.8 0.0
0.6 0.9 1.2
0.6 1.4 1.0 0.4
2.1 1.6 0.6 1.7 3.3 2.0 1.5 1.4 0.9 1.0
0.6 2.4 1.5 1.0 2.1 0.8 1.0 1.5 1.1 0.9 0.4 0.9
1.9 0.9 0.7 0.4 1.3 0.9 0.0 0.6 1.0
0.1 1.2 0.2 1.9 0.3 0.1 0.7
0.9 1.9 1.0
1.6 0.0 0.1 1.5
1.4
1.1 0.2 1.4
0.8 2.3
2.3
3.5
2.8
3.0
2.0
4.4
2.1
3.4
2.3


October 1-15, 1967
Part II, Supplement 1
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - OCTOBER
United States
Department of the Interior
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P. O. Box 271
La Jolla, California 92037
56
58
60
62
64
66
68
70
72
74
54
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°


October 16-31 1967
Part II, Supplement 2
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - OCTOBER
United States
Department of the Interior
Fish and Wildlife Service
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P. O. Box 271
La Jolla, California 92037
NOTICE
This chart is the last of the special 15-day series covering the region of the U.S. west coast albacore fishery in 1967. Distribution will resume in April 1968. During the intervening period you will continue to receive the monthly series covering the entire eastern Pacific.
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
52
54
56
58
60
62
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66
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